

WE CLAIM:

1. A communication device comprising:
  - a modem for controlling operations of the communication device;
  - an RF transmitter coupled to the modem for converting a baseband signal from the modem to a transmitting RF signal;
  - a first switch for receiving and directing the transmitting RF signal from the RF transmitter, the first switch having a first terminal coupled to the RF transmitter, a second terminal, and a third terminal coupled to a receiver signal path, and the first switch switching between the second terminal and the third terminal to connect to the first terminal; and
  - an amplifier having an input coupled to the second terminal of the first switch for amplifying the transmitting RF signal,
  - wherein the modem sends a command to the first switch to switch to the third terminal to allow the transmitting RF signal to bypass the amplifier.
2. The communication device of claim 1, further comprising:
  - an antenna for transmitting or receiving signals; and
  - a second switch for directing received signals having a first terminal coupled to the antenna, a second terminal coupled to the receiver signal path and a third terminal coupled to an output of the amplifier, the second switch switching between the second terminal and the third terminal to connect to the first terminal.
3. The communication device of claim 2, wherein the modem sends a command to the second switch to switch to the second terminal if the modem determines to bypass the amplifier.
4. The communication device of claim 2, wherein the modem sends a command to the second switch to switch to the third terminal if the modem determines to amplify the transmitting RF signal by using the amplifier.

5. The communication device of claim 2, further comprising an RF receiver coupled to the modem for converting a received RF signal to a baseband signal to be transmitted to the modem.

6. The communication device of claim 5, wherein the RF receiver has an input coupled to the receiver signal path.

7. The communication device of claim 6, wherein the modem sends a command to the second switch to switch to the second terminal when the RF receiver is receiving a signal from the antenna.

8. The communication device of claim 2, further comprising:  
an RF filter coupled to the antenna and the second switch for filtering out jammer signals.

9. The communication device of claim 1, wherein the communication device operates in accordance to an 802.11 standard.

10. The communication device of claim 5, wherein the communication device provides half-duplex operation of the RF transmitter and the RF receiver.

11. The communication device of claim 1, wherein the modem determines to bypass the amplifier if a signal amplified by the amplifier may interfere with signals produced by other communication devices.

12. A communication device comprising:  
a controlling means for controlling operations of the communication device;  
an RF transmitting means coupled to the controlling means for converting a baseband signal from the controlling means to a transmitting RF signal;

a first switch means for receiving and directing the transmitting RF signal from the RF transmitting means, the first switch means having a first terminal coupled to the RF transmitting means, a second terminal, and a third terminal coupled to a receiver signal path, and the first switch means switching between the second terminal and the third terminal to connect to the first terminal; and

an amplifying means having an input coupled to the second terminal of the first switch means for amplifying the transmitting RF signal,

wherein the controlling means sends a command to the first switch means to switch to the third terminal to allow the transmitting RF signal to bypass the amplifying means.

13. The communication device of claim 12, further comprising:

an antenna means for transmitting or receiving signals; and

a second switch means for directing received signals having a first terminal coupled to the antenna means, a second terminal coupled to the receiver signal path and a third terminal coupled to an output of the amplifying means, the second switch means switching between the second terminal and the third terminal to connect to the first terminal.

14. The communication device of claim 13, wherein the controlling means sends a command to the second switch means to switch to the second terminal if the controlling means determines to bypass the amplifying means.

15. The communication device of claim 13, wherein the controlling means sends a command to the second switch means to switch to the third terminal if the controlling means determines to amplify the transmitting RF signal by using the amplifying means.

16. The communication device of claim 13, further comprising an RF receiver means for converting a received RF signal to a baseband signal to be transmitted to the controlling means.

17. The communication device of claim 16, wherein the RF receiver means has an input coupled to the receiver signal path.

18. The communication device of claim 17, wherein the controlling means sends a command to the second switch means to switch to the second terminal when the RF receiver means is receiving a signal from the antenna means.

19. The communication device of claim 13, further comprising:  
an RF filter means coupled to the antenna means and the second switch means for filtering out jammer signals.

20. The communication device of claim 12, wherein the communication device operates in accordance to an 802.11 standard.

21. The communication device of claim 16, wherein the communication device provides half-duplex operation of the RF transmitter means and the RF receiver means.

22. The communication device of claim 12, wherein the controlling means determines to bypass the amplifying means if a signal amplified by the amplifying means may interfere with signals produced by other communication devices.

23. A communication device comprising:  
a modem for controlling operations of the communication device;  
an RF transmitter coupled to the modem for converting a baseband signal from the modem to a transmitting RF signal;  
a first switch for receiving and directing the transmitting RF signal from the RF transmitter, the first switch having a first terminal coupled to the RF transmitter, a second terminal and a third terminal coupled to a receiver signal path, and the first switch switching between the second terminal and the third terminal to connect to the first terminal;

an amplifier having an input coupled to the second terminal of the first switch for amplifying the transmitting RF signal;

an antenna for transmitting or receiving signals;

a second switch having a first terminal coupled to the antenna, a second terminal coupled to the receiver signal path and a third terminal coupled to an output of the amplifier, the second switch switching between the second terminal and the third terminal to connect to the first terminal

wherein the modem sends a first command to the first switch to switch to the third terminal and sends a second command to the second switch to switch to the second terminal if the modem determines to allow the transmitting RF signal to bypass the amplifier.

24. The communication device of claim 23, wherein the modem sends a command to the second switch to switch to the third terminal if the modem determines to amplify the transmitting RF signal by using the amplifier.

25. The communication device of claim 23, further comprising an RF receiver for converting a received RF signal to a baseband signal to be transmitted to the modem.

26. The communication device of claim 25, wherein the RF receiver has an input coupled to the receiver signal path.

27. The communication device of claim 26, wherein the modem sends a third command to the second switch to switch to the second terminal when the RF receiver is receiving a signal from the antenna.

28. The communication device of claim 23, further comprising:

an RF filter coupled to the antenna and the second switch for filtering out jammer signals.

29. The communication device of claim 23, wherein the communication device operates in accordance to an 802.11 standard.

30. The communication device of claim 25, wherein the communication device provides a half-duplex operation of the RF transmitter and the RF receiver.

31. The communication device of claim 23, wherein the modem determines to bypass the amplifier if a signal amplified by the amplifier may interfere with signals produced by other communicating devices.

32. An RF transceiver comprising:  
a receiver signal path used to receive an RF input signal;  
an RF receiver coupled to the receiver signal path for converting the received RF input signal to a baseband signal;  
an RF transmitter for converting a received input baseband signal to a transmitting RF signal;  
a switch for receiving and directing the transmitting RF signal, the switch having a first terminal coupled to the RF transmitter, a second terminal coupled to the receiver signal path and a third terminal, and the switch switching between the second terminal and the third terminal to connect to the first terminal;  
a transmitter signal path used to transmit the transmitting RF signal, the transmitter signal path coupled to the third terminal of the switch,  
wherein the switch switches to the second terminal to direct the transmitting RF signal to the receiver signal path in response to a first command.

33. The RF transceiver of claim 32, further comprising an amplifier for amplifying the transmitting RF signal, the amplifier having an input coupled to the transmitter signal path.

34. The RF transceiver of claim 33, wherein the first command allows the transmitting RF signal to bypass the amplifier.

35. The RF transceiver of claim 33, wherein the switch switches to the third terminal to direct the transmitting RF signal to the amplifier in response to a second command.

36. The RF transceiver of claim 35, wherein the second command allows the transmitting RF signal to be amplified by the amplifier.